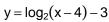
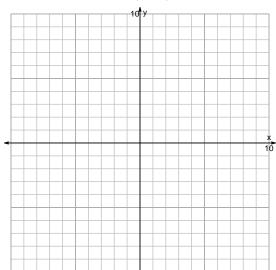
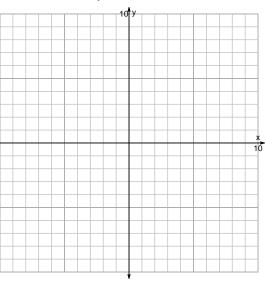
s18quiz: EXP LOG (Practice v141)

1. Graph  $y = \log_2(x-4) - 3$  and  $y = 2^{x-4} - 3$  on the grids below. Also, draw any asymptotes with dotted lines.





$$y = 2^{x-4} - 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$17 = \left(\frac{4}{7}\right) \cdot 2^{5t/3}$$

3. An exponential function  $f(x) = 1.81 \cdot e^{-0.379x}$  is graphed below on a semi-log plot.



- a. Using the plot above, evaluate f(-2.1).
- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.7)$ .